Claims

What is claimed is:

1.　A method for creating a local network topology that decreases congestion on trunk lines between the local network structure and a global information network, said method comprising the steps of:

　　1) providing a local switch fabric network matrix as the local network topology, wherein the switch fabric network matrix is comprised of a plurality of network switching node devices; and

　　2) providing a trunk line that is in communication with the switch fabric network matrix and the global information network, enabling transfer of data and voice communication therebetween.

2.　The method as defined in claim 1 wherein the step of providing the plurality of network switching node devices further comprises the step of coupling at least one end user to one of the plurality of network switching node devices.

3.　The method as defined in claim 2 wherein the method

further comprises the step of providing at least one mass

storage device for each of the plurality of network

switching node devices, thereby enabling each network

switching node device to cache data that can be stored on

5   the global information network.

4.   The method as defined in claim 3 wherein the method

further comprises the step of enabling an end user to

access data from one of the plurality of network switching

10   node devices whenever the data is being stored within the

local switch fabric network matrix.

5.   The method as defined in claim 4 wherein the method

further comprises the steps of:

15   1) enabling only one of the plurality of network

switching node devices to download data from the global

information network when the data is desired; and

          2) enabling the network switching node device that

downloaded the data to share the data with any other

20   network switching node device that desires to cache said

data on its own mass storage device.

6.   The method as defined in claim 1 wherein the method further comprises the step of increasing local traffic within the local switch fabric network matrix to thereby reduce traffic on the trunk line to the global information

5   network.

7.   The method as defined in claim 1 where in the method further comprises the step of reducing congestion on the trunk line to the global information network by:

10   1) caching data within the plurality of network switching node devices that is also available on the global information network;

        2) coupling at least one end user to one of the plurality of network switching node devices; and

15   3) enabling the at least one end user to access the cached data stored within the plurality of network switching node devices instead of accessing the global information network.

20   8.   The method as defined in claim 5 wherein the method further comprises the step of providing a plurality of Open IP Services Platforms to function as the plurality of